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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,993	12/31/2001	Ernest A. Hopcus	56336US002	5306
32692	7590	03/02/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			RHEE, JANE J	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,993	HOPCUS ET AL.	
	Examiner	Art Unit	
	Jane J Rhee	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 50-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 and 50-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1/20/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/03 has been entered.

Rejections Repeated

2. The 35 U.S.C. 102 rejection anticipated by Tsukazaki et al. of claims 1-11,14 has been repeated for the reasons made previously in Paper 8.

3. The 35 U.S.C. 102 rejection anticipated by Tsukazaki et al. of claims 29-43, 43 has been repeated for the reasons made previously in Paper 8.

4. The 35 U.S.C. 103 rejection over Tsukazaki et al. in view of Sadlo et al. of claims 12,13,15-28,44,45,47-49 has been repeated for the reasons made previously in Paper 8.

Response to Arguments

5. Applicant's arguments filed 12/22/03 have been fully considered but they are not persuasive.

In response to applicant's argument that Tsukazaki does not disclose a circumferentially continuous tube structure, Sadlo et al. reference was used to teach a

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circumferentially continuous tube structure in order to provide a more uniformed and predictable characteristics than previous constructions (col. 2 lines 19-20).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tsukazaki et al. and Sadlo et al. both teaches a helically wounded core ribbon with interlocking means.

New Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9,11-14,29-23,25-41,43-46,50-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Someno et al. (10-64607).

Someno et al. discloses a removable core (figure 1 number 3) for supporting a pre-stretched elastomeric tube in a radially expanded condition comprising a tube (figure 1 number 2) having a first end and a second end, at least one plurality of

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sections of primary line of localized weakening starting at the first end and terminating at the second end of the tube (figure 1a number 6), and a plurality of substantially parallel secondary lines of localized weakening (figure 1a number 6a), wherein each secondary weakening line extends from the at least one primary weakening line at the one side thereof (figure 1a number 6b) to a termination point at the other side of at least one primary weakening lines alternately extend from at least one primary weakening line to termination points on opposite sides of at least one primary weakening line to define at least one strip beginning at the first end of the tube and continuing substantially in a serpentine manner to the second end of the tube (figure 1a number 7) and continuing substantially in a serpentine manner within areas of plurality of primary weakening line sections and continuing substantially helically between respective adjacent primary weakening line sections to the second end of the tube the strip comprising a free end starting from the second end of the tube and extending through the tube so as to project from the first end of the tube (figure 8 number 7). Someno et al. discloses that at least one strip comprises a free end starting from the second end of the tube and extending through the tube so as to project from the first end of the tube (figure 1a number 7). Someno et al. discloses that each secondary weakening line extends substantially circumferentially about the tube (figure 1a number 6a). Someno et al. discloses that at least one primary weakening line extends alternately to opposite lateral sides of a straight phantom line (figure 7 number 6e). Someno et al. discloses that at least one primary weakening line extends symmetrically to the phantom line (figure 1a number 6a). Someno et al. discloses that at least one primary weakening line

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has a zig-zag wave form (page 5 line 18). Someno et al. discloses that for wherein all secondary weakening lines the distance in circumferential direction by which a termination point of a secondary weakening line is spaced from at least one primary weakening line is constant (figure 1a number 6a2). Someno et al. discloses that for wherein all of the secondary weakening lines the distance in circumferential direction by which a termination point of a secondary weakening line is spaced from at least one primary weakening line is smaller than a width defined by two successive outermost locations of the at least one primary weakening line arranged on opposite lateral sides of the phantom line (figure 1a numbers 6a2). Someno et al. discloses that the distance is substantially the width of the strip within its portions close to the termination points (figure 1a at point A). Someno et al. discloses that the overall extension of at least one primary weakening line is inclined with respect to a longitudinal dimension of the tube (figure 2b number 6). Someno et al. discloses that the secondary weakening lines are comprised of perforations in the tube (page 3 line 4). Someno et al. discloses that the secondary weakening lines has a reduced thickness in relation to the remaining parts of the tube (figure 2b number 6). Someno et al. discloses that the primary and secondary weakening lines are comprised of perforations in the tube (figure 2 numbers 6,6a,6b). Someno et al. discloses that the tub along its primary and secondary weakening lines has a reduced thickness in relation to the remaining parts of the tube (figure 2 number 6,6a,6b).

Someno et al. discloses that the opposite ends of two respective adjacent primary weakening line sections are located at opposite lateral sides of a phantom line

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(figure 9 between point A and point B). Someno et al. discloses two respective adjacent primary weakening line sections are curved in opposite directions (figure 9 point A and B). Someno et al. discloses that the opposite ends of two respective adjacent primary weakening line sections are displaced in a substantially circumferential direction and are in alignment with respect to each other (figure 9 point B). Someno et al. discloses that the secondary weakening lines extending from one primary weakening line section to an adjacent one comprises at least one winding around the tube (figure 9 number 6f,6d). Someno et al. discloses that each secondary weakening line extends substantially circumferentially of tube (figure 8 number 6g). Someno et al. discloses that the arrangement of the plurality of primary weakening line sections extends alternately to opposite lateral sides of a phantom line (figure 9 number point A and point C). Someno et al. discloses that the phantom line is a straight line and is substantially parallel to the longitudinal axis of the core (an imaginary line that can be placed anywhere in figure 9). Someno et al. discloses that the arrangement of the plurality of primary weakening line sections extends symmetrically to the phantom line (figure 9 number 6e). Someno et al. discloses that the plurality of primary weakening line sections are zig-zag shaped (page 5 lines 18). Someno et al. discloses that for all of the secondary weakening lines, the distance in circumferential direction by which a termination point of the secondary weakening line is spaced from at least one primary weakening line is constant (figure 9 number point C). Someno et al. discloses that for all of the secondary weakening lines the distance in circumferential direction by which a termination point of a secondary weakening line is spaced from a primary weakening line sections is smaller than a width

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defined by two successive outermost locations of the arrangement of the plurality of primary weakening line sections arranged on opposite lateral sides of the phantom line (figure 9 number point C). Someno et al. discloses that the distance is substantially the width of the strip within its portions close to the termination points (figure 9 number point B and point A). Someno et al. discloses that the overall extension of the arrangement of the plurality of primary weakening line sections is inclined with respect to the longitudinal dimension of the tube (figure 2 number 6). Someno et al. discloses that the primary and secondary weakening lines are comprised of perforations in the tube and has a reduced thickness in relation to the remaining parts of the tube (figure 2 number 6a). Someno et al. discloses that wherein the secondary weakening lines extend from one primary weakening line section to an adjacent one comprises at least one winding along the tube (figure 9 number 6c). Someno et al. discloses that the primary line of localized weakening is periodic (figure 9 point C). Someno et al. discloses that the primary line of localized weakening extends through less than the full thickness of the tube (figure 2 number 6).

Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489

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F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of an extruded tube wherein the primary and secondary weakening lines are formed using means to remove material from the extruded tube by including methods of ablation selected from the group consisting of laser ablation, electron beam ablation, plasma ablation, and fluid jet ablation and methods for mechanically cutting the extruded tube is a method of production and therefore does not determine the patentability of the product itself.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15-23,25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Someno et al.

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Someno et al. discloses the removable core described above. Someno et al. discloses two primary lines of localized weakening positioned on the tube and starting at the first end and terminating at the second end of the tube, and spaced apart in circumferential dimension of the tube (figure 9 point A and point B). Someno et al. fail to disclose at least two strips each beginning at the first end of the tube. Someno et al. discloses two strips on each end of tube (figure 10 number 103) for the purpose of breaking the plastic core along the spiral grooves on its outer peripheral surface and removed in strip form from the end part of the tubular cover material.

Since the two strips of Someno et al. and applicant's two strips serve the same function, It would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Someno et al. with two strips at the beginning of the first end of the tube in order to break the plastic core along the spiral grooves on its outer peripheral surface and removed in strip form from the end part of the tubular cover material

8. Claims 10,24,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Someno et al. in view of Tsukazaki et al. (5589667).

Someno et al. discloses the removable core described above. Someno et al. fail to disclose that wherein the tube at the termination points of the secondary weakening lines is provided with radially extending holes. Tsukazaki et al. teaches that wherein the tube at the termination points of the secondary weakening lines is provided with radially extending holes (col. 3 line 67) for the purpose of dispersing the stress which is

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concentrated at the end of a return section and prevents the strip of core material from breaking (col. 4 lines2-4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Someno et al. with the tube at the termination points of the secondary weakening lines is provided with radially extending holes in order to disperse the stress which is concentrated at the end of a return section and prevents the strip of core material from breaking (col. 4 lines2-4) as taught by Tsukazaki et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F.

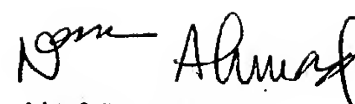
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Ahmad can be reached on 571-272-1487. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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Jane Rhee

February 20, 2004



NASSER AHMAD
PRIMARY EXAMINER